

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A ~~less-lens~~ drive apparatus ~~having, comprising:~~

a movable section ~~which is equipped with~~ including a plurality of either drive coils or magnetic field means for moving a mounted lens ~~to in~~ an optical axis direction and a moving direction orthogonal to said optical axis direction; and

a fixed section ~~for supporting~~ configured to support said movable section, ~~and having either said fixed section including said plurality of magnetic field means for if the movable section includes said drive coils or said fixed section including the plurality of drive coils for if the movable section includes said magnetic field means, wherein~~[[:]]

an x-coordinate value of a center of gravity G and an x-coordinate value of a driving center Df do not accord with each other, ~~provided that~~ a z-axis is set to pass through the center of gravity of the movable section in a direction parallel to the optical axis, a y-axis is set in ~~said a~~ moving direction of the lens, an x-axis is set in a direction orthogonal to the z-axis and the y-axis, the center of gravity of said movable section is G, ~~and a driving center of the movable section in the z-axis direction is Df, a z-coordinate value of the center of gravity G and a z-coordinate value of a driving center Dt are approximately equal, and a driving center of said movable section in the y-axis direction is defined as Dt.~~

Claim 2 (Canceled).

Claim 3 (Currently Amended): The lens drive apparatus as cited in Claim 1, wherein:

a principal point of said lens and the center of gravity G of said movable section approximately accord ~~wit~~ with each other.

Claim 4 (Currently Amended): The lens drive apparatus as cited in Claim 1, wherein:
said plurality of drive coils includes drive coils for the lens in the optical axis
direction and drive coils for the lens in the moving direction; and
respective said magnetic field means provided to each of said drive coils for the lens
in the optical axis direction and drive coils for the lens in the moving direction are arranged
across said lens in the x-axis direction.

Claim 5 (Currently Amended): An optical head apparatus ~~having, comprising:~~
an optical system including an objective lens and a light source ~~for reading and/or~~
~~recording of~~ configured to read or record an optical recording medium[[,]];
a movable section ~~which is equipped with~~ including a plurality of either drive coils or
magnetic field means for moving said objective lens ~~to~~ in an optical axis direction and a
moving direction orthogonal to said optical axis direction; and
a fixed section ~~for supporting~~ configured to support said movable section, ~~and having~~
~~either said fixed section including said plurality of magnetic field means for~~ if the movable
section includes said drive coils or said fixed section including the plurality of drive coils for
if the movable section includes said magnetic field means, wherein[[:]]

an x-coordinate value of a center of gravity G and an x-coordinate value of a driving
center Df do not accord with each other, ~~provided that~~ a z-axis is set to pass through the
center of gravity of the movable section in a direction parallel to the optical axis, a y-axis is
set in said moving direction of the objective lens, an x-axis is set in a direction orthogonal to
the z-axis and the y-axis, the center of gravity of said movable section is G, ~~and~~ a driving
center of the movable section in the z-axis direction is Df, a z-coordinate value of the center
of gravity G and a z-coordinate value of a driving center Dt are approximately equal, and a
driving center of said movable section in the y-axis direction is defined as Dt.

Claim 6 (Canceled).

Claim 7 (Original): The optical head apparatus as cited in claim 5, wherein:
a principal point of said lens and the center of gravity G of said movable section
approximately accord with each other.

Claim 8 (Currently Amended): The optical head apparatus as cited in claim 5,
wherein:

said plurality of drive coils includes drive coils for the objective lens in the optical
axis direction and drive coils for the objective lens in the moving direction; and

respective said magnetic field means provided to each of said drive coils for the lens
in the optical axis direction and drive coils for the objective lens in the moving direction are
arranged across said objective lens in the x-axis direction.

Claim 9 (Currently Amended): An optical disk drive apparatus ~~having, comprising:~~
an optical system including an objective lens and a light source ~~for reading and/or~~
~~recording or configured to read or record~~ an optical recording medium rotated by rotating
means[[],];

a movable section ~~which is equipped with~~ including either a focus coil and a tracking
coil or focus magnetic field means and tracking magnetic field means for moving said
objective lens ~~to~~ in an optical axis direction and a tracking direction orthogonal to said optical
axis direction; and

a fixed section ~~for supporting~~ configured to support said movable section, ~~and having~~
~~either~~ said fixed section including the focus magnetic field means and tracking magnetic field

means ~~for~~ if the movable section includes said focus coil and said tracking coil or said fixed section including the focus coil and the tracking coil ~~for~~ if the movable section includes said focus magnetic field means and said tracking magnetic field means, wherein[[:]]

an x-coordinate value of a center of gravity G and an x-coordinate value of a driving center Df do not accord with each other, ~~provided that~~ a z-axis is set to pass through the center of gravity of the movable section in a direction parallel to the optical axis, a y-axis is set in said moving direction of the objective lens, an x-axis is set in a direction orthogonal to the z-axis and the y-axis, the center of gravity of said movable section is G, ~~and~~ a driving center of the movable section in the z-axis direction is Df, a z-coordinate value of the center of gravity G and a z-coordinate value of a driving center Dt are approximately equal, and a driving center of said movable section in the y-axis direction is defined as Dt.

Claim 10 (Canceled).

Claim 11 (Original): The optical disk drive apparatus as cited in Claim 9, wherein:
a principal point of said lens and the center of gravity G of said movable section
approximately accord with each other.

Claim 12 (Currently Amended): The optical disk drive apparatus as cited in Claim 9,
wherein:

said focus coil and said tracking coil, and said focus magnetic field means and said tracking magnetic field means provided for said focus coil and said tracking are arranged across said objective lens in the x-axis direction.

Claim 13 (New): The lens drive apparatus as cited in Claim 1, wherein the plurality of either drive cells or magnetic field means includes

a first drive coil or a first magnetic field means and a second drive coil or a second magnetic field means,

the first drive coil or the first magnetic field means located only on a first side of the movable section, and

the second drive coil or the second magnetic field means located only on a second side of the movable section, the second side being opposite the first side.

Claim 14 (New): The optical head apparatus as cited in claim 5, wherein the plurality of either drive cells or magnetic field means includes

a first drive coil or a first magnetic field means and a second drive coil or a second magnetic field means,

the first drive coil or the first magnetic field means located only on a first side of the movable section, and

the second drive coil or the second magnetic field means located only on a second side of the movable section, the second side being opposite the first side.

Claim 15 (New): The optical disk drive apparatus as cited in Claim 9, wherein the focus coil or the focus magnetic field means is located only on a first side of the movable section, and

the tracking coil or the tracking magnetic field means is located only on a second side of the movable section, the second side being opposite the first side.